WHAT IS CLAIMED IS:

- 1 1. An apparatus for applying a thermal conductive
- 2 medium to an inside portion of a sheath, the apparatus
- 3 comprising:
- a tubular applicator tip including a nozzle
- 5 positioned in a sidewall of the tubular applicator tip;
- a pump having an input adapted for coupling to
- 7 a source of thermal conductive medium and an output
- 8 coupled to said tubular applicator tip; and
- a control module for controlling the pump and
- thereby the amount of thermal conducive medium applied to
- 11 said sheath by the tubular applicator tip.
- 1 2. The apparatus of claim 1, wherein the tubular
- applicator tip has a closed tip end preventing expulsion
- of thermal conductive medium from the tip in the axial
- 4 direction of said tip.
- 1 3. The apparatus of claim 2, further comprising:
- a contact switch coupled to the control
- 3 circuit, the contact switch being positioned to come into
- 4 contact with the sheath when the sheath is properly
- 5 positioned over the tubular applicator tip.
- 1 4. The apparatus of claim 3, further comprising:
- an applicator shaft for coupling the tubular
- applicator tip to the pump output.

- 1 5. The apparatus of claim 4,
- wherein the nozzle has a diameter in the range
- 3 extending from and including 0.14" to and including
- 4 0.145"; and
- 5 wherein the applicator shaft includes a bleeder
- 6 hole having a diameter one third or less the diameter of
- 7 said nozzle.
- 1 6. The apparatus of claim 3, further comprising:
- a motor, for rotating said shaft, coupled to
- 3 said applicator shaft and to said control module.
- 1 7. The apparatus of claim 6, wherein the control module
- 2 includes:
- a timing circuit for activating said pump in
- 4 response to activation of said contact switch and for
- 5 activating said motor following activation of said pump.
- 1 8. The apparatus of claim 7, wherein the timing circuit
- 2 includes:
- means for deactivating said pump after a set
- 4 period of time; and
- 5 deactivating said motor after deactivation of
- 6 said pump.
- 9. The apparatus of claim 2, wherein said tubular
- 2 applicator tip includes:
- an open shaft end attached to said applicator
- 4 shaft; and

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| 5 | a plurality of nozzles located along a line |
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| 6 | extending in the axial direction between said closed tip |
| 7 | end and said open end. |
| 1 | 10. The apparatus of claim 9 wherein the tubular |
| 2 | applicator tip further comprises: |
| 3 | a mushroom shaped cap portion at the closed tip |
| 4 | end; and |
| 5 | wherein each of said plurality of nozzles is a |
| 6 | hole in the sidewall of said tubular applicator tip. |
| - | 11 |
| 1 | 11. A system for applying a thermal conductive medium to |
| 2 | a portion of the interior of a sheath, the system |
| 3 | comprising: |
| 4 | a thermal conductive medium storage device; |
| 5 | a pump coupled to the thermal conductive medium |
| 6 | storage device; |
| 7 | a thermal conductive medium applicator tip |
| 8 | coupled to said pump and including at least on hole |
| 9 | through which thermal conductive medium can be expelled |
| 10 | when pumped through the applicator tip by said pump; and |
| 11 | a switch coupled to said pump, for controlling |
| 12 | activation of said pump. |
| 1 | 12. The system of claim 11, further comprising: |
| 2 | a hollow applicator shaft for mounting said |
| 3 | thermal conductive medium applicator tip, the hollow |

applicator shaft coupling said thermal conductive medium

applicator tip to the pump; and

- a motor connected to said hollow applicator shaft for causing said applicator shaft to rotate.
- 1 13. The system of claim 12, wherein said thermal
- 2 conductive medium applicator tip is tubular in shape
- 3 having a closed tip end, an open shaft end and a sidewall
- 4 extending from the closed tip end to the open shaft end,
- 5 said hole being located in the sidewall.
- 1 14. The system of claim 13, further comprising:
- a control circuit for coupling said switch to said pump and said motor, the control circuit including
- 4 means for activating said pump in response to activation
- 5 of said switch.
- 1 15. The system of claim 11, wherein said switch is a
- 2 contact switch, the switch being positioned to come into
- 3 contact with the sheath when the sheath is positioned
- 4 over said thermal conductive medium applicator tip.
- 1 16. A method of applying a thermal conductive medium to
- an interior portion of a sheath, the method comprising:
- positioning a sheath over a thermal conductive
- 4 medium applicator tip;
- starting the pumping of the thermal conductive
- 6 medium;
- 7 rotating the applicator tip; and
- stopping the pumping of the thermal conductive
- 9 medium after a first set period of time.

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1 17. The method of claim 16, further comprising:
2 stopping the rotation of the applicator tip
3 after a second set period of time passes, the second
4 period of time starting from the point in time at which

the pumping is stopped.

1 18. The method of claim 17, wherein the applicator tip 2 is attached to a source of thermal conductive medium by 3 an applicator shaft, the method further comprising:

purging the applicator shaft of thermal conductive medium after the rotation of the applicator tip is stopped.

- 1 19. The method of claim 18, further comprising:
 2 following stopping the rotation but prior to
 3 purging, removing the sheath so that it is no longer
 4 positioned over the applicator tip.
- 20. The method of claim 16, further comprising:
 sensing when said sheath is positioned over a
 thermal conductive medium applicator tip; and
 wherein said step of starting the pumping is
 performed in response to sensing that said sheath is
 positioned over the thermal conductive medium applicator
 tip.
- 1 21. The method of claim 17, wherein stopping the pumping 2 of the thermal conductive medium after a first set period 3 of time includes:

| 4 | operating the control circuit to stop the |
|----|---|
| 5 | supply of power to a pump; and |
| 6 | wherein stopping the rotation of the applicator |
| 7 | tip includes: |
| 8 | operating the control circuit to stop the |
| 9 | supply of power to a motor used to rotate the |
| 10 | applicator tip. |

22. The method of claim 19, wherein the first set period of time is long enough to pump sufficient thermal conductive medium to produce a coating on said interior portion of the sheath having a thickness, T, in the range of $.002" \le T \le .004"$.